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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/806,136      | 03/26/2001  | Kenichi Nakanishi    | 450106-02621        | 5076             |

20999 7590 05/06/2004  
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EXAMINER

CHOI, WOO H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2186

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DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/806,136

Applicant(s)

NAKANISHI ET AL.

Examiner

Woo H. Choi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7 – 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Nijjima *et al.* (US Patent No. 5,889,795, hereinafter “Nijjima”).

3. With respect to claims 7, 11, 15, and 19 Nijjima discloses a nonvolatile memory system (Figure 6) comprising:

a plurality N of nonvolatile storages (Figure 6, Chips 0 – 3) within which at least one cluster (block B10) of data is recorded, with each cluster constructed by a plurality K of sectors (Figure 7, sectors in B<sub>n</sub>0) ;

address designating means for designating an address of the cluster in which data is recorded (figure 7);

recording means for recording data into a storage location at the address designated by said address designated means (col. 6, lines 26 – 39);

wherein, said plurality of storages are divided into a plurality of segments (Figure 6, clusters 1 – n);

each said segment is distributed and arranged into said plurality of storages (Figure 6); and

each said segment is composed of a plurality of clusters (Figure 7, blocks  $B_n0 - B_n3$ ), and a first  $N$  clusters ( $B_n0 - B_n3$ ) of a given segment each having first to  $K$ th entire sectors successively stored in first to  $K$ th memory locations (each block contains  $K$  successive memory locations each of which stores a sector, i.e. first sector, sector 0, is stored in the first location, second sector, sector 4, is stored in the second location, etc...), respectively, of a corresponding, one of said  $N$  storages, whereby said  $N$  clusters are continuously arranged across said  $N$  storages (Figures 6,  $N$  blocks are arranged continuously across  $N$  storages).

4. With respect to claims 8, 12, 16 and 20, an access is performed with reference to a logical cluster address/physical cluster address conversion table that is formed for each segment (col. 2, lines 28 – 37, col. 8, lines 6 – 17).

5. With respect to claims 9, 13, 17, and 21, second sector data is transferred to a second storage and first sector data is written into a first storage immediately after the first sector data is transferred to the first storage (col. 6, line 60 – col. 7, line 9).

6. With respect to claims 10, 14, 18, and 22, a segment address, a storage address, and a sector address are created for recording data into plural of said nonvolatile storages (these addresses would be necessary to be able to write to a sector in the right block in the

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right cluster, for example, to access sector 0 in block B<sub>n</sub>0 in cluster n, the cluster number, the block number and the sector number have to be uniquely identified).

7. With respect to claims 23 – 26, N is at least three (Figure 6).

***Response to Amendment***

8. The title of the invention has been amended. Corresponding objection is withdrawn.

9. Claims 7, 11, 15, and 19 have been amended to overcome rejections under 35 U.S.C. 112, first paragraph. Corresponding rejections are withdrawn.

***Response to Arguments***

10. Applicant's arguments filed on February 24, 2004 have been fully considered but they are not persuasive. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicant has not presented persuasive arguments specifically pointing out where the applied reference fails to disclose specific claimed limitations.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (703) 305-3845. The examiner can normally be reached on M-F, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*whc*  
whc  
May 5, 2004

  
MATTHEW KIM  
PATENT EXAMINER  
EBC CENTER 2186